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February 22, 2012

VIA EDGAR AND OVERNIGHT DELIVERY

Ms. Amanda Ravitz
Assistant Director
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

**Re: M/A-COM Technology Solutions Holdings, Inc.
Registration Statement on Form S-1
Amended February 10, 2012
File No. 333-175934**

Dear Ms. Ravitz:

We are submitting this letter on behalf of M/A-COM Technology Solutions Holdings, Inc. (the "Company") in response to the comments set forth in the comment letter of the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") dated February 21, 2012 (the "Comment Letter") relating to the above-referenced Registration Statement on Form S-1 (the "Registration Statement"). The Company will revise the Registration Statement as set forth below in response to the Staff's comments on Amendment No. 6 to the Registration Statement (the "Amendment").

Management's Discussion and Analysis, page 42

Comparison of Three Months Ended December 30, 2011 to the Three Months ended December 31, 2010, page 47

1. Since the Thailand flooding may not be expected to have a long term impact on your results, to the extent possible, please revise to provide information about what proportion of your revenue decline in the quarter was attributable to each of the other causes identified in the first paragraph of this section.

Response: The Company respectfully advises the Staff that it previously disclosed that revenue was \$1.9 million lower in the three months ended December 30, 2011 as compared to the same period in the preceding year and that the lower revenue was primarily due to economic softness in the Company's Networks market and the impact of shipment delays and order cancellations as a result of the Thailand flooding. The Company further disclosed that revenue in the Networks market decreased by \$3.5 million compared to the same period in the preceding year, partially offset by a

\$0.1 million increase in A&D market revenues and a \$1.4 million increase in Multi-market revenues. The Company further disclosed that the decline in Network market revenues was attributable primarily to a slowdown in capital spending by telecommunications operators for mobile backhaul and infrastructure equipment. The Company believes it has adequately disclosed the amount of revenue decline attributable to causes other than the Thailand flooding; however, the Company will revise its disclosure on page 47 of the Amendment as set forth below to further clarify that the lower revenue in the Networks market was a result of a slowdown in capital spending by telecommunications operators and to further clarify the impact of the Thailand flooding on certain markets.

Proposed Revisions to Page 47 of the Amendment (changes to current disclosure shown in bold and underlined):

Revenue. Our revenue decreased \$1.9 million, or 2.5%, to \$73.0 million for the three months ended December 30, 2011, from \$74.9 million for the three months ended December 31, 2010. The decrease in revenue in the 2011 period was primarily due to economic softness in our Networks market, **reflecting a slowdown in capital spending by telecommunications operators**, and the impact of shipment delays and order cancellations as a result of the flooding of our contract manufacturer in Thailand, **which primarily affected our A&D market and Multi-market**. The net impact of product price increases and decreases implemented by us during the 2011 period was largely to offset one another, such that changes in product pricing were not a material driver of the overall decrease in our revenue in the 2011 period over the 2010 period. In the three months ended December 30, 2011, our Networks market revenue decreased \$3.5 million compared to the 2010 period, which we believe was attributable primarily to a slowdown in capital spending by telecommunications operators for mobile backhaul and infrastructure equipment. A&D market revenue increased slightly by \$0.1 million in the 2011 period compared to the 2010 period. We attribute this growth to increased sales of radar products, partially offset by weaker overall market demand for tactical and public safety radios **and the impact of the Thailand flooding**. Multi-market revenues increased by \$1.4 million in the 2011 period compared to the 2010 period. We attribute this growth primarily to the continued strength of the automobile industry, particularly in North America, partially offset by weaker demand of our general purpose products through our distribution channel **and the impact of the Thailand flooding**.

Accretion of Class B Conversion Liability, page 48

2. We see that during the three months ended December 30, 2011, you recorded income from changes in the fair values of your derivative liabilities for the Class B conversion liability and common stock warrant liability of \$13.6 million and \$1.5 million, respectively. Further, on pages 62 and 63 you disclose that the estimated fair value of your common shares as of September 30, 2011 and November 16, 2011 remained at \$3.88 per share, but you did not address the fair value of your stock at December 31, 2011. Please tell us and revise the filing to provide a detailed explanation of the valuation procedures you performed as of December 30, 2011 that supports this decrease in the fair value of the derivative liabilities as compared to September 30, 2011. In particular, explain how the changes in the inputs and assumptions you used, such as fair value of the common stock, probability of events, etc., resulted in the decrease in the value of the liabilities. In addition, reconcile for us the fair value of the common stock used in the December 30, 2011 valuation of the liabilities to the expected midpoint of your initial public offering price range.

Response: The Company will revise its disclosure on page 63 of the Amendment as set forth below to provide a detailed explanation of the valuation procedures performed in connection with the Company's determination of the fair value of the common stock at December 30, 2011. The Company respectfully advises the Staff that it obtained a contemporaneous valuation of the derivative liabilities and common stock as of December 30, 2011. The valuation was prepared using a methodology consistent with the September 30, 2011 and earlier valuations discussed in the Registration Statement and resulted in lower valuations of each of the components than those received as of September 2011, including the determination of a common stock value of \$3.52 per share. Similar to the valuations previously obtained by the Company, the December 2011 valuation included consideration of various available alternative potential liquidity opportunities on a probability weighted basis, including opportunities for sale of the Company or an initial public offering of the Company's common stock, using a range of potential outcomes in terms of the timing of such events and at what valuations such events might achieve. The December 30, 2011 valuation generally reflected lower estimated values for the potential liquidity scenarios as compared to the September 2011 valuation, while including a consistent probability weighting to the initial public offering scenarios as in the prior valuation. The lower estimated values for the potential liquidity scenarios in the December 30, 2011 valuation reflected a sequential decline in the Company's revenue, gross margin and operating margin for the quarter ended December 30, 2011, as well as continuing public concern over the pace of economic recovery and overall financial and stock market performance. As a result, the lower estimated values for the potential liquidity scenarios in the December 30, 2011 valuation had the general effect of lowering the valuation of the Company's derivative liabilities as well as the valuation of the common stock relative to the September 2011 estimates.

The Company will also revise its disclosure on page 63 of the Amendment as set forth below to disclose the factors it believes contributed to the difference between the estimated price range of its initial public offering and the fair value of its common stock as of December 30, 2011. The estimated price range for the Company's initial public offering is the product of discussions between the Company and the underwriters, and while it takes into account the factors noted below, it was not determined using the same methodology used by management and the third party valuation firm to value the Company's common stock in December 2011. Based on this difference in methodology, the Company is not able to quantify the amount that any particular factor contributed to the determination of the estimated price range or the difference between the December 2011 valuation and the estimated midpoint of that range. The Company believes the difference between the estimated fair value of its common stock as of December 30, 2011 and the expected midpoint of the Company's initial public offering price range is a result of the following factors:

- a steadying U.S. economy and recovery of U.S. capital markets;
- less weighting of alternative liquidity opportunities that favor holders of the Company's preferred stock in arriving at the estimated offering price range;
- elimination of the preferences of the Company's preferred stock, which will be converted to common stock upon closing of the initial public offering;
- the size of the offering and investors' opportunities to invest in other companies similar to the Company (whether in an initial public offering or otherwise);
- the increased likelihood of consummating the initial public offering since December 30, 2011; and
- exclusion of any marketability or illiquidity discount in light of the anticipated timing of the offering.

Proposed Revisions to Page 63 of the Amendment (changes to current disclosure shown in bold and underlined):

September 2011 to December 2011

We experienced modest revenue growth in the fourth quarter of fiscal year 2011 while continuing our cost savings initiatives and product development investments in the fourth quarter of fiscal year 2011 with revenue of \$78.8 million for the quarter ended September 30, 2011 compared to revenue of \$78.7 million for the quarter ended July 1, 2011. On September 30, 2011, we entered into a loan agreement which provides for a revolving credit facility of up to \$100.0 million that matures in September 2016, replacing a previous \$50.0 million revolving credit facility. As of September 30, 2011, we obtained a valuation of our common stock prepared using a methodology consistent with the one used for the July 1, 2011 valuation discussed above. The September 30, 2011 valuation determined the fair value of our common stock to be \$3.88 per share, on a non-controlling basis. Similar to the valuation we previously obtained in July 2011, this valuation included consideration of various alternative potential liquidity opportunities available to us on a probability weighted basis, such as a sale of our company or an initial public offering of our common stock, using a range of potential outcomes in terms of the timing of such events and at what valuations such events might occur. The September 30, 2011 valuation generally reflected lower estimated values for the potential liquidity scenarios than reflected in the July 2011 valuation, and also gave a higher probability weighted to an initial public offering scenario than the prior valuation. These changes in assumptions had the general effect of lowering the valuation of our common stock since the prior valuation, reflecting continuing public concern over the pace of economic recovery and financial and stock market performance. ~~We experienced a decline in revenue in the first quarter of fiscal year 2012 with revenue of \$73.0 million for the quarter ended December 30, 2011 compared to revenue of \$78.8 million for the quarter ended September 30, 2011.~~ Based on the valuation obtained and the factors discussed above, our board of directors contemporaneously concluded that the fair value of our common stock was \$3.88 per share as of the grant date in November 2011. We did not make any equity grants in September; ~~or~~ October ~~or December~~ 2011.

We experienced a decline in revenue in the first quarter of fiscal year 2012 with revenue of \$73.0 million for the quarter ended December 30, 2011 compared to revenue of \$78.8 million for the quarter ended September 30, 2011. As of December 30, 2011, we obtained a valuation of our common stock prepared using a methodology consistent with the one used for the September 30, 2011 valuation discussed above. The December 30, 2011 valuation determined the fair value of our common stock to be \$3.52 per share, on a non-controlling basis. Similar to the valuation we previously obtained in September 2011, this valuation included consideration of various alternative potential liquidity opportunities available to us on a probability weighted basis, such as a sale of our company or an initial public offering of our common stock, using a range of potential outcomes in terms of the timing of such events and at what valuations such events might achieve. The December 30, 2011 valuation generally reflected lower estimated values for the potential liquidity scenarios as compared to the September 2011 valuation, while including a consistent probability weighting to the initial public offering scenario as in the prior valuation. The lower estimated values for the potential liquidity scenarios in the December 30, 2011 valuation had the general effect of lowering the valuation of our common stock as compared to the September 2011 valuation, reflecting a sequential decline in our revenue, gross margin and operating margins for the quarter ended December 30, 2011, continuing public concern over the pace of economic recovery and overall financial and stock market performance. Based on the valuation obtained and the factors discussed above, we concluded that the fair value of our common stock was \$3.52 per share as of December 30, 2011. We did not make any equity grants in December 2011.

Offering Price

In February 2012, through discussions with the underwriters, we determined the estimated initial public offering price per share of this offering, as set forth on the cover page of this prospectus, to be between \$ _____ and \$ _____ per share. The estimated initial public offering price range represents management's best estimate arrived through discussions between us and the underwriters, but involves complex and subjective judgments. We believe the difference between the fair value of our common stock as of December 30, 2011 and the expected midpoint of the price range of this offering arrived at through discussion with the underwriters is the result of the following factors:

- a steady U.S. economy and recovery of U.S. capital markets;
- less weighting of alternative liquidity opportunities that favor holders of our preferred stock in arriving at the estimated offering price range;
- elimination of the preferences of our preferred stock, which will be converted to common stock upon closing of this offering;
- the size of this offering and investors' opportunities to invest in other companies similar to us (whether in an initial public offering or otherwise);
- the increased likelihood of consummating our initial public offering since December 30, 2011; and
- exclusion of any marketability or illiquidity discount in light of the anticipated timing of this offering.

In addition, the price range took into account the recent performance and public valuation of similar companies, including companies whose financial and stock performance has improved since our December 2011 valuation. This included a review of the offering price and recent aftermarket performance of companies that completed initial public offerings in 2011 and 2012, including several that had not completed their initial public offerings at the time of our December 2011 valuation.

The price range reflects our discussions with the underwriters and the factors noted above but was not determined using the same methodology used by management and the third party valuation firm to value our stock in December 2011. Because the price range was determined through discussions with the underwriters and was not determined using the methodology that management and the third party valuation firm used to value our stock in December 2011, we are not able to quantify the amount that any particular factor contributed to the determination of the estimated price range.

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We greatly appreciate your prompt response to this letter. If you have any questions or comments concerning these responses, please feel free to contact me at (303) 291-2362.

Respectfully submitted,

PERKINS COIE LLP

/s/ Jason Day

Jason Day

cc: Charles Bland
Conrad Gagnon
Clay Simpson
Keith Higgins